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PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220 I as, where applicable, item 5 below.							
061300-0680									
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)							
PCT/US2004/031216	23/09/2004	10/10/2003							
Applicant	Applicant								
OSHKOSH TRUCK CORPORATION	OSHKOSH TRUCK CORPORATION								
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Authansmitted to the International Bureau.	nority and is transmitted to the applicant							
This International Search Report consists	of a total of sheets.								
X It is also accompanied by	a copy of each prior art document cited in this	report.							
	international search was carried out on the bas less otherwise indicated under this item.	sis of the international application in the							
The international this Authority (Ru		ation of the international application furnished to							
b. With regard to any nucleo	otide and/or amino acid sequence disclosed	in the international application, see Box No. I.							
2. Certain claims were fou	nd unsearchable (See Box II).								
3. X Unity of invention is lac	king (see Box III).								
4. With regard to the title ,									
X the text is approved as su	ibmitted by the applicant.								
the text has been establis	shed by this Authority to read as follows:								
_									
5. With regard to the abstract,									
X the text is approved as su	ubmitted by the applicant.								
the text has been establis	shed, according to Rule 38.2(b), by this Authori	ty as it appears in Box No. IV. The applicant							
may, within one month fro	om the date of mailing of this international sear	cn report, submit comments to this Authority.							
6. With regard to the drawings,									
1	oublished with the abstract is Figure No1_								
X as suggested by	the applicant.								
	is Authority, because the applicant failed to sug	ggest a figure.							
as selected by the	is Authority, because this figure better characte	erizes the invention.							
b. none of the figures is to b	e published with the abstract.								

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 2003/105566 A1 (MILLER STEVEN P) 5 June 2003 (2003-06-05) abstract; figure 2 paragraphs [0019], [0021], [0023], [0033], [0037]	1-10, 23-31
X	US 2002/015354 A1 (BUCKELEW RICHARD A) 7 February 2002 (2002-02-07) abstract; figures 2,3 paragraphs [0022], [0026], [0031], [0046]	1-10, 21-31
A	US 6 181 994 B1 (COLSON JAMES CAMPBELL ET AL) 30 January 2001 (2001-01-30) the whole document	1-21, 23-31

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.		
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search	Date of mailing of the international search report		
23 May 2005	3 1. 10. 05		
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Authorized officer Geuss, H		

INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.: Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-3, 23-31
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,23-31

A vehicle system comprising a control system for an equipment service vehicle and a PDA

the control system is configured to wirelessly communicate IO information to the PDA

2. claims: 14-22

A system comprising a fleet of equipment service vehicles comprising a control system for an equipment service vehicle and a PDA

the control system is configured to wirelessly communicate IO information to the PDA the PDA capable to generate a report comparing utilisation information.

PCI/US2004/031216

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
US 2003105566	A1	05-06-2003	CA MX US	2396339 A1 PA02007393 A 2003028296 A1	01-02-2003 11-08-2004 06-02-2003	
US 2002015354	A1	07-02-2002	NONE			
US 6181994	B1	30-01-2001	JР	2000289583 A	17-10-2000	

То:				PCT				
see form PCT/ISA/220				WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 <i>bis</i> .1)				
				Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet)				
1 ''	licant's or agent's file form PCT/ISA/2			FOR FURTHER ACTION See paragraph 2 below				
1	rnational application T/US2004/03121		International filing date (23.09.2004	day/month/year)	Priority date (day/month/year) 10.10.2003			
1	rnational Patent Clas 6F19/00	sification (IPC) or	both national classification	and IPC				
1	licant HKOSH TRUCK	CORPORATION	ON		,			
1.	This opinion co	ontains indicati	ons relating to the follow	lowina items:				
``	<u> </u>		-	January Market				
	⊠ Box No. I	Basis of the or	oinion					
	☐ Box No. II	Priority						
	⊠ Box No. III		·	ard to noveity, inventi	ve step and industrial applicability			
 ☑ Box No. IV Lack of unity of invention ☑ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 								
	☐ Box No. VI	Certain docum						
	🛛 Box No. VII	Certain defect	s in the international app	plication				
	🛭 Box No. VIII	Certain obsen	ations on the internatio	nal application				
2.	FURTHER ACT	ION						
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.								
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.								
	For further optio	ns, see Form P	CT/ISA/220.					
3.	For further detai	ils, see notes to	Form PCT/ISA/220.					

Name and mailing address of the ISA:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 Authorized Officer

Geuss, H

Telephone No. +49 89 2399-7330



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/031216

	Box N	o. I Basis of the opinion						
1.	. With regard to the language , this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.							
	This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).							
2.		egard to any nucleotide and/or amino acid sequence disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of:						
	a. type	e of material:						
		a sequence listing						
		table(s) related to the sequence listing						
	b. forn	nat of material:						
		in written format						
	in computer readable form							
c. time of filing/furnishing:								
		contained in the international application as filed.						
		filed together with the international application in computer readable form.						
		furnished subsequently to this Authority for the purposes of search.						
3.	ha Co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as opropriate, were furnished.						
4.	Additio	onal comments:						

International application No. PCT/US2004/031216

	x No. III Non-establishment o Dicability	f opi	inion with regard to novelty, inventive step and industrial			
			ntion appears to be novel, to involve an inventive step (to be non have not been examined in respect of:			
	the entire international application,					
Ø	claims Nos. 14-22					
bec	ause:					
	the said international application does not require an international					
	the description, claims or drawing unclear that no meaningful opin		(indicate particular elements below) or said claims Nos. are so could be formed (specify):			
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.					
\boxtimes	no international search report has been established for the whole application or for said claims Nos. 14-22					
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:					
	the written form		has not been furnished			
			does not comply with the standard			
	the computer readable form		has not been furnished			
			does not comply with the standard			
	the tables related to the nucleon not comply with the technical re	tide a equire	and/or amino acid sequence listing, if in computer readable form only, do ements provided for in Annex C-bis of the Administrative Instructions.			
	See separate sheet for further of	detai	Is			

	Bo	x No. IV	Lack of unity of in	vention			
1. ☑ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has						pplicant has:	
			paid additional fees.				
			paid additional fees u	ınder pro	otest.		
		⊠	not paid additional fe	es.			
2.		This Ai	uthority found that the olicant to pay additiona	requirer al fees.	ment of uni	y of invention is not complied	with and chose not to invite
3.	Thi	is Autho	rity considers that the	requiren	nent of unit	of invention in accordance v	vith Rule 13.1, 13.2 and 13.3 is
		complie	d with				
	\boxtimes	not com	plied with for the follow	ving rea	sons:		
		see se	eparate sheet				
4.	Со	nsequer	ntly, this report has bee	en estab	olished in re	spect of the following parts o	f the international application:
☐ all parts.							
	\boxtimes	the part	s relating to claims No	s. 1-13,	23-31		
	Bo	x No. V dustrial	Reasoned stateme	ent und is and e	er Rule 43 explanation	bis.1(a)(i) with regard to no s supporting such stateme	velty, inventive step or ent
1.	Sta	atement					
	No	ovelty (N))	Yes: No:	Claims Claims	11-13 1-10,23-31	
	lnv	entive s	tep (IS)	Yes: No:	Claims Claims	11-13	
	Inc	dustrial a	applicability (IA)	Yes: No:	Claims Claims	1-31	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Ref. Item V.2

Documents

The following documents cited in the international search report are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: US 2003/105566 A1 (MILLER STEVEN P) 5 June 2003

D2: US 2002/015354 A1 (BUCKELEW RICHARD A) 7 February 2002

D3: US-B1-6 181 994 (COLSON JAMES CAMPBELL ET AL) 30 January 2001

Novelty and Inventive Step

The present application does not meet the requirements of Article 33(2) PCT, because the subject-matter of claim 1 lacks novelty.

Document D1 discloses all the following features which are included in independent claim 1 of the present application (comments and reference signs in brackets refer to D1):

a vehicle system comprising a control system for an equipment service vehicle (abstract) comprising:

a power source (fig. 2)

a power transmission link (fig. 2),

a plurality of input devices (dito)

a plurality of output devices (dito)

a plurality of microprocessor based interface modules and a communication network (dito)

the plurality of interface modules being coupled to the power source by way of power transmission link (dito, this is evident),

the plurality of interface modules being interconnected to each other by way of the communication network (dito, fig.2)

each of the plurality of interface modules being coupled to respective ones of the plurality of input devices and the plurality of output devices (dito, e.g. ABS controller 22, P[0021])

and the plurality of interface modules storing IO status information for the ... input devices and the ... output devices (this is evident and a known feature of interface modules), and

a personal digital assistant (136,P[0033],[0037])

wherein the control system is configured to wirelessly communicate at least some of the IO status information to the personal digital assistant ([0033])

For the same reasons also independent claims 23 and 28 lack novelty, Art. 33(2) PCT, since these claims have been worded in an analogous manner.

Furthermore claims 2 - 10, 24 to 27 and 29 to 31 do not seem to contain any features which, in combination with the features of any claim to which they refer, meet the requirements of PCT with respect to novelty and/or inventive step. These claims suggest only slight constructional changes in the device of claim 1 which comes within the scope of the customary practice - with regard to the Documents D1 to D3, followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of the claims 2 - 10, 24 to 27 and 29 to 31 lacks at least inventive step.

Reference is made to the passages cited in the search report.

Ref. Item VII

- 1. All Independent claims are not in the two-part form (Rule 6.3(b) PCT), which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT and PCT-Guidelines, Sect. IV, III-2.3a).
- 2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

Ref. Item VIII

Missing reference signs render the comprehension of the invention difficult. Reference signs in parentheses should be inserted in the claims to increase their intelligibility. This applies to both the preamble and characterising portion (see the PCT-Guidelines, III-4.11).

IMPORTANT INDICATION

The applicant is requested to file amendments by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT. Moreover, the applicant's attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

The applicant is kindly requested to submit these indications in handwritten form on a copy of the relevant parts of the application as filed (Regel 66.8 b) PCT), the filing of completely retyped replacement pages is undesired for reasons of procedural economy.